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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/519,142

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Henrik Jensen

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08/06/2008

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EXAMINER

SMITH, JENNIFER A

ART UNIT

PAPER NUMBER

1793

MAIL DATE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/519,142	<b>Applicant(s)</b> JENSEN ET AL.	
	<b>Examiner</b> JENNIFER A. SMITH	<b>Art Unit</b> 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 5/29/2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 72-144 is/are pending in the application.
- 4a) Of the above claim(s) 72-74 and 137-144 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1 and 75-136 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of Application***

Claims 1 and 72-144 have been amended.

Applicant's election with traverse to prosecute the invention of Group I (claims 1 and 75-136) in the reply filed on 05/29/2008 is acknowledged. Claims 72-74 and 137-144 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. The traversal is on the ground(s) that the claims share the special technical feature which the Applicant considers to be that the resulting product is obtained on a solid reactor material. This is not found persuasive because the special technical feature shared between the inventions is a metal oxide, metal oxidhydroxide or metal hydroxide product. This product is disclosed in the Sarrade reference.

The restriction requirement is still deemed proper and is therefore made FINAL.

The timely submission under 37 CFR 1.129(a) filed on 05/29/2008 is not fully responsive to the prior Office action because Applicant has failed to comply with the restriction requirement in which the election of species was divided in groups (groups are now labeled (a)-(h) for clarification). Since the submission appears to be a *bona fide* attempt to provide a complete reply to the prior Office action, applicant is given a shortened statutory period of ONE MONTH or THIRTY DAYS from the mailing date of

this letter, whichever is longer, to submit a complete reply. This shortened statutory period supersedes the time period set in the prior Office action. This time period may be extended pursuant to 37 CFR 1.136(a).

Applicant is now required to elect 1 species in **each** of the groups (a)-(h).

***Election of Species – Invention I***

This application contains claims directed to more than one species of the generic invention I. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Species (a)

- i. the product is substantially crystalline (Claim 76)*
- ii. the product is substantially amorphous (Claim 77)*
- iii. the product is a mixture of several different phases (**Claim 78**)*

Species (b)

- iv. the temperature is kept at a fixed temperature (Claim 82)
- v. the temperature is an increasing temperature (Claim 83)
- vi. the temperature is a decreasing temperature (Claim 84)
- vii. the temperature profile is an arbitrary combination (**Claim 85**)

Species (c)

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*viii. the pressure is kept at a fixed pressure (Claim 87)*

*ix. the pressure is an increasing pressure (Claim 88)*

*x. the pressure is a decreasing pressure (Claim 89)*

*xi. the pressure profile is an arbitrary combination (**Claim 90**)*

*Species (d)*

*xii. the supercritical solvent is CO<sub>2</sub> (Claims 91-92)*

*xiii. the supercritical solvent is isopropanol (Claims 93-94)*

*Species (e)*

*xiv. the supercritical solvent is brought into phase before introduction (Claim 95)*

*xv. the supercritical solvent is brought into phase after introduction (Claim 96)*

*Species (f)*

*xvi. introducing a plurality of different metal precursors into the reactor (**Claim 100**)*

*xvii. metal precursor is metal alkoxide (Claims 101-104)*

*xviii. metal-containing precursor is a metal salt (Claims 105-107)*

*Species (g)*

*xix. the solid reactor filling material comprises a polymer (Claims 117-119)*

*xx. the solid reactor filling material comprises a metal (Claims 120-121)*

*xxi. the solid reactor filling material comprises a metal oxide (Claims 122-123, 127)*

*xxii. the solid reactor filling material comprises a ceramic (Claim 124)*

*xxiii. the solid reactor filling material comprises a metal sulphate (Claim 125)*

*xxiv. the solid reactor filling material comprises a metal halide (Claim 126)*

*Species (h)*

xxv. product is separable from the solid reactor filling material with no further treatments of the solid reactor filling material (Claim 130)

xxvi. product is separable from the solid reactor filling material without substantially degrading the solid reactor filling material (Claim 131)

xxvii. product is separable from the solid reactor filling material in a way that allows the solid reactor filling material to be re-used as solid reactor filling material (Claim 132)

xxviii. product is separable from the solid reactor filling material by flushing the solid reactor filling material in a fluid (Claim 133)

xxix. product is separable from the solid reactor filling material by vacuum means (Claim 134)

xxx. product is separable from the solid reactor filling material by blowing means (Claim 135)

xxxi. product is separable from the solid reactor filling material by ultrasonic means (Claim 136)

Applicant is required, in reply to this action, to elect a single species **FROM EACH OF THE GROUPS (a)-(h)** to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a

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claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

Claim 78 is generic of claims 76-77

Claim 85 is generic of claims 82-84

Claim 90 is generic of claims 87-89

Claim 100 is generic of claims 101-107

The following claim(s) are generic: 78, 85, 90, 100.

### ***Joint Inventors***

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one

or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Conclusion***

Claims 1 and 75-136 are subject to election of species.

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER A. SMITH whose telephone number is (571)270-3599. The examiner can normally be reached on Monday - Friday, 8:30am to 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571)272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jerry A Lorengo/  
Supervisory Patent Examiner, Art Unit 1793

Jennifer A. Smith  
July 30, 2008  
TC 1793

JS